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WE CLAIM:

- 1. A food product for human consumption, wherein the food product comprises the whole seeds, seed parts, flour or starch obtained from *Phleum* spp. seeds.
- 2. The food product of claim 1, wherein the food product is gluten-free.
- The food product of claim 1 or 2, wherein the food product is selected from the list consisting of pancakes, noodles, bread, muffins, buns, biscuits, cookies, pastries,
 cupcakes, doughnuts, pretzels, crackers, chips, cakes, stews, soups, dressings, beverages, stuffing, pizza dough, cereals, candies and snack foods.
 - 4. The food product of claim 1, wherein the seeds are obtained from *Phleum* pretense L.
 - 5. A food product for human consumption, wherein the food product comprises flour obtained from *Phleum* spp. seeds.
 - 6. The food product of claim 4, wherein the food product is gluten-free.
 - 7. The food product of claim 5 or 6, wherein the food product is selected from the group consisting of pancakes, noodles, bread, muffins, buns, biscuits, cookies, pastries, cupcakes, doughnuts, pretzels, crackers, chips, cakes, stews, soups, dressings, beverages, stuffing, pizza dough, cereals, candies and snack foods.
 - 8. The food product of claim 7, wherein the seeds are obtained from *Phleum* pretense L.
- A method of producing gluten-free food products for human consumption,
 wherein the method comprises obtaining the seed or grain of Timothy grass (*Phleum pretense* L.); producing flour, starch, malt or cereal-based products from the seed or

grain; and using the flour, starch, malt or cereal-based products to produce gluten-free food products for human consumption.

- 10. A method of producing food and beverage products for human consumption,
 5 wherein the method comprises obtaining seed from Timothy grass (*Phleum pratense* L.);
 processing the seed into food-grade flour, starch, malt, and cereal-based products; and
 utilizing the flour, starch, malt and cereal-based products to produce food and beverage
 products, wherein the food and beverage products are essentially devoid of gluten.
- 10 11. A method of making risen bread products, said method comprising producing flour from the seeds of Timothy grass and producing risen bread products using the flour, wherein the risen bread products are essentially devoid of gluten.
 - 12. The risen bread products produced by the method of claim 11.

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- 13. A method of making flatbread products, said method comprising producing flour from the seeds of Timothy grass and producing risen bread products using the flour, wherein the flatbread products are essentially devoid of gluten.
- 20 14. The flatbread products produced by the method of claim 13.
 - 15. A method of making extruded cereal products for human consumption, said method comprising processing seeds obtained from seeds of Timothy grass and producing extruded cereal products using the processed seeds, wherein the extruded cereal products are essentially devoid of gluten.
 - 16. The extruded cereal products produced by the method of claim 15.
- 17. A method of making malt extract for brewing, said method comprising sprouting
 30 Timothy grass seeds and using the sprouted seeds to produce gluten-free malt extract for brewing, wherein the malt extract is essentially devoid of gluten.

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- 18. The malt extract produced by the method of claim 17.
- 19. A method of making food products or beverage products, said method comprising using the gluten-free, malt extract of claim 18 to produce the food product or beverage product, wherein the food products or beverage products are essentially devoid of gluten.
- 20. A method of making a food product, said method comprising producing the food product using flour obtained from seeds of Timothy grass combined with gum, wherein the food product is essentially devoid of gluten.
- The food product produced by the method of claim 20.
 - 22. The gum of claim 21, wherein the gum is a xanthan or guar gum.
- 15 23. A method of making fermented breads or fermented bread products, said method comprising producing flour from the seeds of Timothy grass and producing the fermented breads or fermented bread products using the flour, wherein the fermented breads or fermented bread products are essentially devoid of gluten.
- 20 24. The fermented breads or fermented bread products produced by the method of claim 23.